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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,855	08/02/2001	Thomas G. Davis	PW 053403 272576	8609
7590 11/17/2004 Pillsbury Winthrop LLP Intellectual Property Group 50 Fremont Street San Francisco, CA 94105			EXAMINER HOSSAIN, TANIM M	
			ART UNIT 2145	PAPER NUMBER

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/921,855	Applicant(s) DAVIS, THOMAS G.	
	Examiner Tanim Hossain	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-59 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claim 21 is objected to because of the following informalities: the phrase “transmit said log report a log viewer” is unclear. Examiner reads the phrase as “transmit said log report to log viewer”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation “said identifying, said determining, and said forwarding”. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (U.S. 5,727,002) in view of Edwards (U.S. 6,684,180).

As per claim 1, Miller teaches a method of selectively implementing reliable multicast transport techniques (column 2, lines 20-29; lines 64-65); and multicasting data to one or more multicast addresses in accordance with said selectively implementing (column 2, lines 20-29). Miller does not specifically teach the specific multicasting of produced log reports. Edwards teaches the sending of a produced log report to a server (column 6, lines 39-44; where the production of the log report is inherent). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to multicast log reports as taught by Edwards in the system of Miller. Both inventions are from the same field of endeavor, namely the transmission of computer information over a network. The motivation to combine teachings lies in the fact that there exists a need to send log reports to multiple nodes in the case that computer troubleshooting is taking place remotely by those nodes, for example. Edwards' teaching in the system of Miller allows for the efficient transmissions of log reports to achieve this end.

As per claim 2, Miller-Edwards teaches the method of claim 1 further comprising: identifying one or more subscribers of said one or more multicast addresses (Miller: column 3, line 62 – column 4, line 1; where the existence of speed groups implies identification, and where the receiving clients constitute subscribers); determining whether said one or more subscribers require reliable data (Miller: column 2, lines 44-46); and forwarding said log report to each of

said one or more subscribers in accordance with said identifying and said determining (Miller: column 2, lines 20-29).

As per claim 3, Miller-Edwards teaches the method of claim 1 wherein said selectively implementing includes receiving a request for reliable data transmission from an application producing said log report (Miller: column 2, lines 44-46).

As per claim 4, Miller-Edwards teaches the method of claim 2 wherein said determining includes receiving a request for reliable data transmission from an application subscribing to said one or more multicast addresses (Miller: column 2, lines 44-46).

As per claim 5, Miller-Edwards teaches the method of claim 1 wherein said producing, said selectively implementing, and said multicasting are implemented by a computer server (Miller: column 2, lines 20-22).

As per claim 6, Miller-Edwards teaches the method of claim 5, but does not specifically teach the implementation of said identifying, said determining, and said forwarding by an additional computer server. Official notice is taken that the inclusion of an additional server is well known to one of ordinary skill in the art at the time of the invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the well-known component of an additional computer server that identifies, determines, and forwards, into the system of Miller-Edwards because it would allow for load balancing, scalability, and failure protection, as examples, as is known in the art.

As per claim 7, Miller-Edwards teaches the method of claim 1 further comprising transmitting said log report to a log viewer for display of at least some information related to said

log report (Edwards: figure 4). Motivation to combine this limitation is discussed in the treatment of claim 1.

As per claim 8, Miller-Edwards teaches the method of claim 2 further comprising: identifying a log viewer as one of said one or more subscribers (Miller: Abstract; column 2, lines 20-29; Edwards: figure 4; where the recipient of the multicast, when sent a log, becomes a log viewer. Identification of this recipient occurs in the retransmission step, or during the setup of "speed groups," for example); transmitting said log report to said log viewer for display of at least some information related to said log report (Miller: column 2, lines 20-29; Edwards: figure 4).

As per claim 9, Miller-Edwards teaches a multicast logging system comprising: a log client publishing log reports to one or more multicast addresses on a communications network (Miller: column 2, lines 20-37; Edwards: column 6, lines 39-44; figure 4) a log server subscribing to at least one of said one or more multicast addresses and receiving said log reports (Miller: column 2, lines 20-37; Edwards: column 6, lines 39-44; figure 4; where the reception implies subscription, or agreeing to receive the data); and a data storage medium receiving said log reports from said log server (Edwards: column 6, lines 39-44; where the receiving server obviously stores reports).

As per claim 10, Miller-Edwards teaches the system of claim 9 further comprising a log viewer subscribing to at least one of said one or more multicast addresses and allowing reception and display of information related to said log reports (Miller: column 2, lines 20-37; Edwards: column 6, lines 39-44; figure 4).

As per claim 11, Miller-Edwards teaches the system of claim 9 wherein said log client comprises a computer executable program application generating said log reports (Edwards: column 6, lines 39-44).

As per claim 12, Miller-Edwards teaches the system of claim 9, but does not specifically teach that the said log server and said data storage medium are incorporated into a single physical machine. Official notice is taken that the integration of the server and storage medium into one physical machine is well known to one of ordinary skill in the art at the time of the invention. Servers inherently consist of a storage medium. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the well-known component of combining a log server and a storage medium into a single machine, into the system of Miller-Edwards because it would achieve space-saving, for example.

As per claim 13, Miller-Edwards teaches the system of claim 9, but does not specifically teach that the said log server comprises a plurality of distributed physical machines. Official notice is taken that using distributed machines to comprise a server is well known to one of ordinary skill in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the well-known component of distributed physical machines making up a log server, into the system of Miller-Edwards. This is because the inclusion of multiple machines allow for multiple points of failure, to enable further efficiency of the invention, where if one machine malfunctions, the entire system need not fail.

As per claim 14, Miller-Edwards teaches the system of claim 9 wherein said log client selectively implements reliable multicast transport techniques (Miller: column 2, lines 20-63).

As per claim 15, Miller-Edwards teaches the system of claim 9 wherein said log server selectively implements reliable multicast transport techniques (Miller: column 2, lines 20-63).

As per claim 16, Miller-Edwards teaches the system of claim 10 wherein said log viewer comprises a console application (Edwards: column 5, line 62 – column 6, line 8).

As per claim 17, Miller-Edwards teaches the system of claim 16, but does not specifically teach that the said log viewer is incorporated into a World Wide Web browser application. Official notice is taken that the use of a WWW browser application to browse system data or to view information is well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the well-known component of using a WWW browser format in the log viewer system of Miller-Edwards, because it would allow for further ease of use by using a viewer that is familiar to users as a WWW browser application is.

Claim 18 is rejected on the same bases as claims 1 and 9, as claim 18 is a medium of implementation for claims 1 and 9.

As per claim 19, Miller-Edwards teaches the computer readable medium of claim 18 further encoded with data and computer executable instructions, further causing an apparatus to receive a request for reliable data transmission from an application producing said log report (Miller: column 2, lines 20-63).

As per claim 20, Miller-Edwards teaches the computer readable medium of claim 18 further encoded with data and computer executable instructions, further causing an apparatus to receive a request for reliable data transmission from said one or more multicast subscribers (Miller: column 2, lines 20-63).

As per claim 21, Miller-Edwards teaches the computer readable medium of claim 18 further encoded with data and computer executable instructions, further causing an apparatus to: transmit said log report to log viewer (Edwards: column 5, line 67 – column 6, line 8; column 6, lines 39-60); and request said log viewer to display information related to said log report (Edwards: column 6, lines 39-60). Motivation to combine teachings are discussed in the treatment of claim 1.

As per claim 22, Miller-Edwards teaches a multicast logging system comprising: a log client publishing log data to one or more multicast addresses on a communications network (Miller: column 2, lines 20-63; Edwards: column 6, lines 39-44); and a log viewer subscribing to at least one of said one or more multicast addresses and allowing reception and display of information related to said log data (Miller: column 2, lines 20-63; Edwards: column 6, lines 39-44, column 5, line 62 – column 6, line 8).

As per claim 23, Miller-Edwards teaches the system of claim 22, wherein said log client publishes said log data without using reliable multicast transport techniques (Miller: Abstract; column 2, lines 20-29; where any of the transport techniques constitutes the potential non-use of reliable multicast transport techniques).

As per claim 24, Miller-Edwards teaches the system of claim 22 wherein said log client comprises a computer executable program application generating said log data (Miller: column 2, lines 20-63; Edwards: column 6, lines 39-44).

As per claim 25, Miller-Edwards teaches the system of claim 22 wherein said log viewer comprises a console application (Edwards: column 5, line 62 – column 6, line 8).

Claim 26 is rejected on the same basis as claim 17.

As per claim 27, Miller-Edwards teaches the system of claim 22 further comprising: a log server subscribing to at least one of said one or more multicast addresses and receiving said log data (Miller: column 2, lines 20-63; Edwards: column 6, lines 39-44); and a data storage medium receiving said log data from said log server (Miller: column 2, lines 20-63; Edwards: column 6, lines 39-44; where the existence of storage is necessitated by the nature of the invention).

As per claim 28, Miller-Edwards teaches the system of claim 27, but does not specifically teach that the said log server and said data storage medium are incorporated into a single physical machine. Official notice is taken that the integration of the server and storage medium into one physical machine is well known to one of ordinary skill in the art at the time of the invention. Servers inherently consist of a storage medium. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the well-known component of combining a log server and a storage medium into a single machine, into the system of Miller-Edwards because it would achieve space-saving, for example.

As per claim 29, Miller-Edwards teaches the system of claim 27, but does not specifically teach that the said log server comprises a plurality of distributed physical machines. Official notice is taken that using distributed machines to comprise a server is well known to one of ordinary skill in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the well-known component of distributed physical machines making up a log server, into the system of Miller-Edwards. This is because the inclusion of multiple machines allow for multiple points of failure, to enable further efficiency of the invention, where if one machine malfunctions, the entire system need not fail.

As per claim 30, Miller-Edwards teaches the system of claim 27 wherein said log client selectively implements reliable multicast transport techniques (Miller: column 2, lines 20-63).

As per claim 31, Miller-Edwards teaches the system of claim 27 wherein said log server selectively implements multicast transport techniques (Miller: column 2, lines 20-63).

As per claim 32, Miller-Edwards teaches a method of logging multicast data messages in a communications network; said method comprising: producing a message to be published to one or more multicast addresses (Miller: column 2, lines 20-63; Edwards: column 6, lines 39-44); said message containing data to be logged (Edwards: column 6, lines 39-44); determining whether said data must be reliable (Miller: column 2, lines 38-46); implementing reliable multicast transport techniques in accordance with said determining (Miller: column 2, lines 20-63); and publishing said data to said one or more multicast addresses in accordance with said determining and said implementing (Miller: column 2, lines 20-63).

As per claim 33, Miller-Edwards teaches the method of claim 32 further comprising: identifying one or more subscribers to said one or more multicast addresses; ascertaining whether said one or more users require said data to be reliable; and forwarding said message to each of said one or more subscribers in accordance with said identifying and said ascertaining (Miller: column 2, lines 20-63).

As per claim 34, Miller-Edwards teaches the method of claim 32 wherein said determining includes receiving a request for reliable data transmission from an application producing said message (Miller: column 2, lines 20-63).

As per claim 35, Miller-Edwards teaches the method of claim 33 wherein said ascertaining includes receiving a request for reliable data transmission from an application subscribing to said one or more multicast addresses (Miller: column 2, lines 20-63).

As per claim 36, Miller-Edwards teaches the method of claim 33 wherein said producing, said determining, and said publishing are implemented by a computer server (Miller: figure 2).

As per claim 37, Miller-Edwards teaches the method of claim 36, but does not specifically teach that said identifying, said ascertaining, and said forwarding are implemented by an additional computer server. Official notice is taken that the use of an additional server is well known, to allow for load-balancing, scalability, and failure protection.

As per claim 38, Miller-Edwards teaches the method of claim 32 further comprising: providing a log viewer capable of receiving published data addressed to at least one of said one or more multicast addresses (Edwards: column 5, line 62 – column 6, line 8); and displaying at least some of said published data received as a result of said providing (Edwards: column 5, line 62 – column 6, line 8).

As per claim 39, Miller-Edwards teaches an apparatus comprising: a log client generating log reports (Edwards: column 6, lines 39-44); and multicasting means for multicasting said log reports to one or more multicast addresses on a communications network (Miller: column 2, lines 20-63).

As per claim 40, Miller-Edwards teaches the apparatus of claim 39 wherein said log client comprises a computer executable program application generating said log reports (Edwards: column 6, lines 39-44).

As per claim 41, Miller-Edwards teaches the apparatus of claim 39 wherein said log client and said multicasting means are incorporated into a single physical machine (Miller: figure 2).

As per claim 42, Miller-Edwards teaches the apparatus of claim 39 wherein said multicasting means selectively implements reliable multicast transport techniques (Miller: column 2, lines 20-63).

As per claim 43, Miller-Edwards teaches an apparatus comprising: a log server subscribing to one or more multicast addresses and receiving log reports transmitted to said one or more multicast addresses (Miller: column 2, lines 20-63; Edwards: column 6, lines 39-44); and a data storage medium receiving said log reports from said log server (Edwards: column 6, lines 39-44).

As per claim 44, Miller-Edwards teaches the apparatus of claim 43 further comprising a log viewer subscribing to at least one of said one or more multicast addresses and allowing reception and display of information related to said log reports (Edwards: column 5, line 62 – column 6, line 8).

As per claim 45, Miller-Edwards teaches the apparatus of claim 43, but does not specifically teach that the said log server and said data storage medium are incorporated into a single physical machine. Official notice is taken that the integration of the server and storage medium into one physical machine is well known to one of ordinary skill in the art at the time of the invention. Servers inherently consist of a storage medium. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the well-known component

of combining a log server and a storage medium into a single machine, into the system of Miller-Edwards because it would achieve space-saving, for example.

As per claim 46, Miller-Edwards teaches the apparatus of claim 43, but does not specifically teach that the said log server comprises a plurality of distributed physical machines. Official notice is taken that using distributed machines to comprise a server is well known to one of ordinary skill in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the well-known component of distributed physical machines making up a log server, into the system of Miller-Edwards. This is because the inclusion of multiple machines allow for multiple points of failure, to enable further efficiency of the invention, where if one machine malfunctions, the entire system need not fail.

As per claim 47, Miller-Edwards teaches the apparatus of claim 43 wherein said log server selectively implements reliable multicast transport techniques (Miller: column 2, lines 20-63).

As per claim 48, Miller-Edwards teaches the apparatus of claim 44 wherein said log viewer comprises a console application (Edwards: column 5, line 62 – column 6, line 8).

As per claim 49, Miller-Edwards teaches a method of multicasting alarm messages in a communications network; said method comprising: producing an alarm report comprising critical system data (Edwards: column 6, lines 9-14; where the display differences constitute an alarm report); selectively implementing reliable multicast transport techniques (Miller: column 2, lines 20-63); and multicasting said alarm report to one or more multicast addresses in accordance with said producing and said selectively implementing (Miller: column 2, lines 20-63).

As per claim 50, Miller-Edwards teaches the method of claim 49 further comprising: identifying one or more subscribers to said one or more multicast addresses; determining whether said one or more subscribers require reliable data; and forwarding said alarm report to each of said one or more subscribers in accordance with said identifying and said determining (Miller: column 2, lines 20-63).

As per claim 51, Miller-Edwards teaches the method of claim 49 further comprising: transmitting said alarm report to a viewer for display of at least some information related to said alarm report (Edwards: column 6, lines 39-44; column 5, line 62 – column 6, line 8).

As per claim 52, Miller-Edwards teaches a multicast alarm system comprising: a client publishing alarm reports to one or more multicast addresses on a communications network (Miller: column 2, lines 20-63; Edwards: column 6, lines 39-44; column 5, line 62 – column 6, line 8) and a viewer subscribing to at least one of said one or more multicast addresses and allowing reception and display of information related to said alarm reports (Edwards: column 6, lines 39-44; column 5, line 62 – column 6, line 8).

As per claim 53, Miller-Edwards teaches the system of claim 52 further comprising: a server subscribing to at least one of said one or more multicast addresses and receiving said alarm reports (Miller: column 2, lines 20-63; Edwards: column 6, lines 39-44); and a data storage medium receiving said alarm reports from said server (Miller: column 2, lines 20-63; Edwards: column 6, lines 39-44; where the data storage medium is inherent).

As per claim 54, Miller-Edwards teaches the system of claim 52 wherein said client comprises a computer executable program application generating said alarm reports (Miller:

column 2, lines 20-63; Edwards: column 6, lines 39-44; where the ability to generate alarm reports necessitates the existence of a computer program).

As per claim 55, Miller-Edwards teaches the system of claim 53, but does not specifically teach that the said server and said data storage medium are incorporated into a single physical machine. Official notice is taken that the integration of the server and storage medium into one physical machine is well known to one of ordinary skill in the art at the time of the invention. Servers inherently consist of a storage medium. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the well-known component of combining a log server and a storage medium into a single machine, into the system of Miller-Edwards because it would achieve space-saving, for example.

As per claim 56, Miller-Edwards teaches the system of claim 53, but does not specifically teach that the server comprises a plurality of distributed physical machines. Official notice is taken that using distributed machines to comprise a server is well known to one of ordinary skill in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the well-known component of distributed physical machines making up a log server, into the system of Miller-Edwards. This is because the inclusion of multiple machines allow for multiple points of failure, to enable further efficiency of the invention, where if one machine malfunctions, the entire system need not fail.

As per claim 57, Miller-Edwards teaches the system of claim 52 wherein said client selectively implements reliable multicast transport techniques (Miller: column 2, lines 20-63).

As per claim 58, Miller-Edwards teaches the system of claim 53 wherein said server selectively implements reliable multicast transport techniques (Miller: column 2, lines 20-63).

As per claim 59, Miller-Edwards teaches the system of claim 52 wherein said viewer comprises a console application (Edwards: column 5, line 62 – column 6, line 8).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

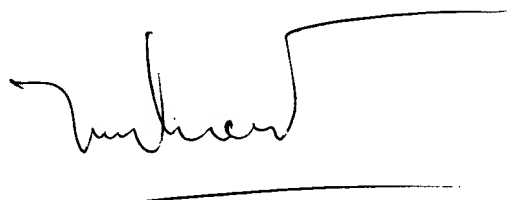
- a. Dillon (U.S. 6,351,467) teaches a system and method of multicasting multimedia content.
- b. Stern (U.S. 6,366,914) teaches an audiovisual content distribution system.
- c. Basani et al. (U.S. 6,718,361) teaches a method and apparatus for reliable and scalable distribution of data files in distributed networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571/272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703/872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tanim Hossain
Patent Examiner
Art Unit 2141


LE HIEN LUU
PRIMARY EXAMINER